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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,686	08/03/2001	Keiji Yano	027650-928	9925

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EXAMINER

DURAND, PAUL R

ART UNIT PAPER NUMBER

3721

17

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/830,686

Applicant(s)

YANO, KEIJI

Examiner

Paul Durand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9-11,14-17,20-24,27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler (US 5,231,817) in view of Fielibert (US 3,679,509) in further view of Condo et al (US 3,381,441).

In regard to claims 9,16 and 22, Sadler discloses the invention substantially as claimed including a heat sealing device as part of a vertical form and fill machine, comprised of a operation jaw 30, with a flat surface, facing the seal zone, a counter jaw 31, comprised of a curved surface 56, facing the seal zone, that transversely seals a package 99 filled with a liquid, the seal jaws 30 and 31 being able to collapse the tube and remove the air from the pouch before sealing (see Figs. 1, 2a, 2b, Abstract, C3, L8-27 and C4, L33-35). What Sadler does not disclose is the use of a curved operation surface that is in the seal zone and the specific sealing of the package while moving the liquid during sealing. However, Fielibert teaches that it is old and well known in the art of sealing packages to provide a sealing apparatus with a sealing head comprised of sealing members 9 and 11, comprised of flat sealing surface 10, chevron shaped surfaces 12 and 13, that faces and contacts the seal zone for the purpose of providing a sealed area that is free from contaminants (see Figs.1,2 and C3, L6-14). Furthermore,

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Condo teaches that it is old and well known in the art to provide a sealing machine with means for flatten the tube prior to sealing for the purpose of removing the liquid from the sealing area of a package (see C2, L10-18). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Sadler with the flattening means as taught by Condo for the purpose of increasing sealing capability.

In regard to claims 10, 11, 17, 23 and 24, Sadler discloses the invention as claimed including a counter jaw 30 with a curved surface 56 that is in the form of a chevron

In regard to claims 15 and 28, Sadler discloses the invention as claimed including a resistance body 30 for forming a seal zone (see Figs. 2a, 2b). Furthermore, the Examiner gives little patentable weight to the packaging material being comprised of a metal and thermoplastic layer since the intended use of the device is independent of the material used to package the product.

In regard to claims 14,20 and 27, Sadler discloses the invention substantially as claimed including resistance heating device for sealing members 30. What Sadler does not disclose is ultrasonic heating means for sealing packages. However Condo teaches that it is old and well known in the art to provide a sealing machine with an ultrasonic sealing device 19 with sealing member 20, heated by ultrasonic waves for the purpose of increasing manufacturing efficiency (see Figs. 1,5,8 and C3, L63-68). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Sadler with the ultrasonic heating means for sealing packages as taught by Condo for the purpose of increasing manufacturing efficiency.

In regard to claims 15 and 27, the Examiner gives little patentable weight to the packaging material being comprised of a metal and thermoplastic layer since the intended use of the device is independent of the material used to package the product.

3. Claims 12, 18, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler in view of Fielibert in further view of Fukuda (US 5,347,795).

Sadler discloses the invention substantially as claimed including sealing members 30 and 31. What Sadler does not disclose is a sealing member that is comprised of ridge formed at the operation surface. However, Fukuda teaches that it is old and well known in the art to provide transverse sealing members with sealing members 20 that are in the form of discontinued ridges for the purpose of increasing manufacturing efficiency (see Fig. 13). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Sadler with ridged sealing members as taught by Fukuda for the purpose of increasing manufacturing efficiency.

4. Claims 13, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler in view of Fielibert in further view of Konno et al (US 5,787,690).

Sadler discloses the invention substantially as claimed including resistance heating device for sealing members 30. What Sadler does not disclose is inductance heating means for sealing packages. However Konno teaches that it is old and well known in the art to provide a sealing machine with a transverse sealing device 1 with sealing member 35 and 36, heated by inductor 19 for the purpose of increasing manufacturing efficiency (see Figs. 4-7 and C2, L20-29). Therefore, it would have been

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obvious to one having ordinary skill in the art to have modified the invention of Sadler with the inductance heating means for sealing packages as taught by Konno for the purpose of increasing manufacturing efficiency.

In regard to claims 13 and 26, the Examiner gives little patentable weight to the packaging material being comprised of a metal and thermoplastic layer since the intended use of the device is independent of the material used to package the product.

Response to Arguments

5. Applicant's arguments filed 1/9/04 have been fully considered but they are not persuasive.

6. Applicant argues that none of the references used in the rejection teach or suggest a seal or counter jaw that faces and contacts the seal zone during transverse sealing. More specifically, Applicant argues that the references do not show a sealing arrangement where the operational surface of the seal jaw is heated and the operational surface of the counter jaw is not and that the operational surface of the seal jaw is flat and that of the counter jaw contains mixture/removal means (i.e. a contoured surface of various configurations).

Firstly, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the heated seal surface and the non heated counter surface) are not recited in the rejected claim(s). Although the claims are interpreted in light of the

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specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Secondly, the examiner asserts that there is sufficient motivation to combine the references, and do in fact teach the applicant's invention. The primary reference of Sadler was chosen to show applicant that the limitations claimed of a liquid fill, form and seal device are well known in the art to include the cutting and expulsion of air from the package. The teaching of Fielibert was chosen to show applicant that it is old and well known in the art, to provide a sealing device with a contoured surface and a flat surface (both heated) for the specific purpose of hygienically sealing a package.

Therefore, for the reasons indicated above, the rejection is deemed proper.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 703-305-4962. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Durand
February 19, 2004



Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700